

ZINOV'YEVA, I.S.; SHERSHACHEVA, L.I.; IZRAILEVA, L.M.; SHPAGINA, M.K.

Drug resistance of dysentery bacilli. Antibiotiki 4 no.6:88-92
H-D '59. (MIRA 13:3)

1. Kuybyshevskiy institut epidemiologii, mikrobiologii i gigieny.
(SHIGELLA pharmacol.)
(ANTIBIOTICS pharmacol.)

ZINOV'YEVA, Kh.G. [Zinov'ieva, Kh.H.]

Retention of properties by strain 28 (*Azotobacter chroococcum*)
adapted to wheat. Mikrobiol.zhur. 21 no.2:15-19 '59.

(MIRA 12:9)

1. Z Institutu mikrobiologii AN URSR.
(AZOTOBACTER)

ZINOV'YEVA, Kh. G.

COUNTRY : USSR
CATEGORY : Soil Science. Organic Fertilizers.
ABST. JOUR. : PZhNicol., No. 23 1958, No. 104490
AUTHOR : Zinov'eva, Kh. G.
INST. :
TITLE : Increasing the Effectiveness of Azotobacterin

ORIG. SUR. : Kolgospnik Ukraini, 1957, No. 8, 22

ABSTRACT : No abstract.

Card: 1/1

19

RUBENCHIK, L.I.; BARSHOVA, O.I.; ZINOV'YEVA, Kh.G.

Interrelations between Azotobacter and some soil bacteria. Report
no.1. Mikrobiol.zhur. 9 no.4:3-10 '48. (MIRA 9:9)

1. Iz otdela pochvennykh mikroorganizmov (zav. otdelom - L.I.Rubenchik)
Instituta mikrobiologii imeni akademika D.K.Zabolotnogo Akademii nauk
USSR.

(AZOTOBACTER) (SOILS--BACTERIOLOGY)

RUBENCHIK, L.I.; ZINOV'YEVA, Kh.G.

Formation of bios-type phytohormones in cultures of Azotobacter
chroococcum. Report no.1. Mikrobiol. zhur. 9 no.4:11-16 '48.

(MIRA 9:9)

1. Iz otdela pochvennykh mikroorganizmov (sav. otdelon - L.I.Ruben-
chik) Instituta mikrobiologii imeni akademika D.K.Zabolotnogo
Akademii nauk USSR.

(AZOTOBACTER)

(HORMONES (PLANTS))

ZINOV'YEVA, Kh. G.

RUBENCHIK, L. I., BERSHOVA, O. I. and ZINOV'YEVA, Kh. G. "The interrelationship between isotobacter and certain soil bacteria", (Report 2), Mikrobiol. zhurnal, Vol. X, No. 1, 1946, p. 3-10 (In Ukrainian, resume in Russian).

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No.7 1949).

ZINOV'YEVA, Kh. G.

RUBENCHIK, I. I. and ZINOV'YEVA, Kh. G. "The formation of phytohormones of the 'bios' type in cultures of *Asotobacter chroococcum* [sic]", (Report 2), Mikrobiol, zhurnal, Vol. X, No. 1, 1948, p. 11-17, (In Ukrainian, resume in Russian).

SO: U-3042, 11 March 53, (Lopotis 'Zhurnal 'nykh Statey, No.7 1949).

ZINOV'YEVA, KH. G.

Zinov'yeva, Kh. G. "The interrelationship between azotobacter and certain soil bacteria", (Resport 3), Mikrobiol. zhurnal, Vol. XI, Issue 1, 1949. p. 8-18, (In Ukrainian, resume in Russian).

SO: U-4392, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No 21, 1949).

ZINOV'YEVA, Kh. G. and SAVCHENKO-BEL'SKAYA, O. T.

"Some Data on Indigenous Strains of Azotobacter", Mikrobiol Zhur, Vol. 11, Issue 3,
pp 3-9, 1949.

ZINOV'YEVA, Kh. G.

USSR/Biology (Agriculture) - Bacterial Fertilizers

Feb 50

"Experiments on the Use of Azotogen in the Ukrainian SSR After World War II," L. I. Rubenchik, V. T. Smaliy, Kh. G. Zinov'yeva, O. I. Bershov, Div. of Soil Microorganisms, Inst Microbiol imeni Acad D. K. Zabolotnyy, Acad Sci Ukrainian SSR

"Mikrobiologichnyi Zhur" Vol XI, No 4, pp 5-24

Expts on the use of azotogen were carried out over large areas at sovkhoses in various oblasts of the Ukrainian SSR. Azotogen was found to be effective in improving yields. Azotogen prepd on the basis of the local azobacter strain K was more effective in expts. on wheat, corn, potatoes, and sugar beets than that prepd with the std strain 53. More work should be done on the isolation of highly active azobacter strains from Ukrainian soils.

20371

ZINOV'YEVA, KH. H.

Bacteria, Aerobic

Influence of the rhizosphere of some agricultural plants on azotobacters.
Mikrobiol. zhur. 12 no. 4, 1950

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

ZINOV'YEVA, Kh. G.

"The Influence of the Rhizospheres of Certain Agricultural Crops on Azotobacter, Report 1". Mikrobiol Zhur, Kiev, Vol. 12, No. 1, pp 67-81, 1950.

ZINOV'YEVA, Kh. H.

Soils - Bacteriology

Influence of the rhizosphere of some agricultural plants on azotobacters. Mikrobiol. zhur.
12 no. 4 (1950)

Monthly List of Russian Accessions, Library of Congress, August, 1952. Unclassified.

ZINOV'YEVA, Kh.G.

Effect of the rhizosphere of some agricultural plants on Azotobacter.
Report no.3:34-47 '51. (MLRA 9:9)

1. Iz otdela obshchey mikrobiologii (zav. otdelom - L.I. Rubenchik)
Instituta mikrobiologii imeni akademika D.K. Zabolotnogo Akademii
nauk USSR.

(RHIZOSPHERE MICROBIOLOGY)

(AZOTOBACTER)

RUBENCHIK, L.I.; SHALIY, V.T.; ZINOV'YEVA, Kh.G.; BRESHOVA, O.I.

Activity of local Azotobacter strains from soils of the Ukrainian
S.S.R. Mikrobiol, zhur. 13 no.2:3-20 '51. (MIRA 9:9)

1. Iz otdela obshchey mikrobiologii (zav. otdelom - L.I. Rubenchik)
Instituta mikrobiologii imeni akademika D.K. Zabolotnogo Akademi
 nauk USSR.

(UKRAINE--AZOTOBACTER)

ZINOV'YEVA, Kh.O.

~~Effect of the rhizosphere of some agricultural plants on Azotobacter.~~
Report no.2. Mikrobiol.shur. 13 no.2:21-33 '51. (MIRA 9:9)

1. Iz otdela obshchey mikrobiologii (sav. otdelom - L.I. Rubenchik)
Instituta mikrobiologii imeni akademika D.K. Zabolotnogo Akademii nauk
USSR.

(RHIZOSPHERE MICROBIOLOGY)

(AZOTOBACTER)

ZINOV'YEVA, Kh.G.

Preparation of local azotobacterin. Mikrobiol.zhur. 15 no.2:85-86
'53. (MLRA 7:3)
(Fertilizers and manures) (Azotobacter)

ZINOV'YEVA, Kh.G.; MITRASOVA, Ye.V.; KANTOROVICH, R.M.; BONDARENKO, M.M.

Preservation of azotobacterin. Mikrobiol.shur. 16 no.2:20-24 '54.
(MIRA 8:5)

1. Z Institutu mikrobiologii AN URSR i Kiiva'kogo savodn bakterial'-
nykh dobriv.

(AZOTOBACTER)

(FERTILIZERS AND MANURES)

~~ZINOV'YEVA, Kristina Gavrilovna; BERSHOVA, Ol'ga Ippolitovna; RUBENCHIK,~~
L.Y., vidpovidal'nyy redaktor; POLYAKOV, M.I., redaktor vidavnitstva;
KORNILO, M.T., tekhnicheskyy redaktor

[Azotobacterin and its use in Ukrainian collective farms] Azoto-
bakteryn i yoho zastosuvannya v kolhospakh Ukrainy. Kyiv, Vyd-vo
Akademii nauk URSR, 1956. 24 p. (MIRA 10:2)

1. Chlen-korrespondent Akademii nauk URSR (for Rybenchik)
(Azotobacter) (Soil inoculation)

"APPROVED FOR RELEASE: 07/16/2001

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ZINOVYEVA, K. G.

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R002065220018-5"

ZINOV'YEVA, Kh.O. : TISHCHENKO, G.H.

Ways of increasing the effectiveness of azotobacterin given to
potatoes in the Ukrainian Plesye. Mikrobiol. zhur. 18 no.3:25-29
'56. (MLRA 9:10)

1. Z Institutu mikrobiologii Akademii nauk URSR ta Kiivs'koi s.-g.
stantsii VNDISP.

(POLESYE--POTATOES)

(AZOTOBACTER)

ZINOV'YEVA, Kh.G. [Zinov'ieva, Kh.H.]; KLYUSHNIKOVA, T.H.

Synthesis of vitamins by the cultures of *Azotobacter chroococcum*
adapted to some farm crops. Mikrobiol. zhur. 24 no.6:26-31 '62
(MIRA 17:5)

ZINOV'YEVA, Kh.G. [Zinov'ieva, Kh.H.]

Azotobacter of turf-Podzolic soils of Polesye in the Ukrainian
S.S.R. Mikrobiol.zhur. 26 no.6:3-9 '64.

(MIRA 18:8)

1. Institut mikrobiologii i virusologii AN UkrSSR.

ZINOV'YEVA, Kh.G. [Zinov'ieva, Kh.H.]

Scientific and methodological conference on bacterial fertilizers.
Mikrobiol. zhur. 25 no.1:74 '63. (MIRA 17:5)

ZINOV'YEVA, Khristina Gavrilovna; VLASYUK, P.A., akademik, red.;
DENATENKO, A.I., red.; KVITKA, S.P., tekhn. red.

[Azotobacter and farm plants] Azotobakter i sel'skokhoziaistven-
nye rasteniia. Kiev, Gos.izd-vo sel'khoz.lit-ry, USSR, 1962.
178 p. (MIRA 16:3)

(Azotobacter) (Field crops)

ZINOV'YEVA, Kh. G., Doc Biol Sci -- (diss) "Inter-relations of nitrogen bacteria with higher plants." Kiev, 1960. 43 pp; (Academy of Sciences Ukrainian SSR, Division of Biological Sciences); 300 copies; price not given; list of author's work at end of text (17 entries); (KL, 22-60, 134)

1. ZINOV'YEVA, KH. G.
2. USSR (600).
7. "The Effect of the Rhizosphere of Certain Agricultural Plants on Azotobacter. Report II-III", Mikrobiolog. Zhurnal, Vol 13, No. 2, 1951, pp 21-33 and 34-47.
9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132, Unclassified.

Z. NOVYENNA, Kh. G.

USSR/Cultivated Plants - Potatoes, Vegetables, Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10845

Author : Zlov'eva, Kh.G., Volkova, F.E.

Inst : -

Title : Use of Azotobacterin in Turf-Humus Pot Cultivation of Tomatoes.

Orig Pub : Mikrobiol. zh., 1957, 19, No 2, 62-63

Abstract : No abstract.

Card 1/1

29

ZINOV'YEVA, Kh.G.

Effect of root secretions and root extracts of some agricultural plants on Azotobacter [with summary in English]. Mikrobiologiya 27 no.1:75-81. Jn-F '58. (MIRA 11:4)

1. Institut mikrobiologii AN USSR, Kiyev.
(AZOTOBACTER) (RHIZOSPHERE MICROBIOLOGY)

ZINOV'YEVA, KH G.

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AZOTOBAKTERIN I YOGO ZASTOSUVANNYA V
KOLGOSPAKH UKRAYINI [AZOTOBAKTERIN
(NITRIC GERMICIDE) AND ITS UTILIZATION
IN UKRAINIAN COLLECTIVE FARMS, BY]
KH. H. ZINOV'YEVA I O.I. BERSHOVA.
KYYIV, VYD-VO AKADEMIYI NAUK UKRAYINS'-
KOYI RSR, 1956.

24 P. ILLUS., TABLES.

AT HEAD OF TITLE: ADADEMIYA NAUK
UKRAINSKOY SSR. RADA NAUKOVO-TEKHNI-
CHNOYI PROFAHANDY.

ZINOV'YEVA, Kh.G.

Enzymatic activity of *Azotobacter chroococcum* cultures adapted to different field crops. Mikrobiol.zhur. 19 no.4:22-29 '57.

(MIRA 11:1)

1. Z Institutu mikrobiologii AN URSR.
(AZOTOBACTER) (ENZYMES)

ZINOV'YEVA, Kh.G.; VOLKOVA, F.Ye.

Applying azotobacterin to tomatoes raised in peat-humus pots.
Mikrobiol.zhur. 19 no.2:62-63 '57. (MLRA 10:9)

1. Z Institutu mikrobiologii AN URSR.
(TOMATOES) (AZOTOBACTER)

The second sound in He II under higher pressures. V. P. Pavlov and E. N. Zinov'eva. *Zhar. Ekspol. Teor. Fiz.* (J. Exptl. Theoret. Phys.) 18, 438-42 (1944) of C.A. 41, 3321. — The velocity u of the "second sound" was detd., essentially by the same resonance method as described previously, over the whole range of existence of He II, from the pressure of the satd. vapor to the pressure of freezing or transition to He I, and from the λ -line down to about 1.3°K. The results are represented by families of isobars (2.7-47 atm.) and of isotherms (1.42-2.185° K.). The isobars, of a shape similar to the vapor pressure curve, show a max. which shifts to lower temps. as the pressure increases; the line passing through the maxima runs parallel to the λ -line along which $u = 0$. The isotherms fall uniformly with the pressure, down to $u = 0$ at the λ -line. In the temp. range of freezing of He II, u decreases with the pressure the slower, the lower the temp., and, at the point of disappearance of the second sound, has a finite value which increases continuously in the direction of lower temps. The uncertainty in u is exp., on the av., to 2%. The λ -line and the fusion line, detd. by this method, are in good agreement with Keesom and Keesom (C.A. 39, 7169). N. Thou

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ZINOV'YEVA, K. N.

ZINOV'YEVA, K. N. -- "Investigation of the Properties of Second Bound." Sub 8
Mar 52, Inst of Physical Problems imeni S. I. Vavilov, Acad Sci USSR.
(Dissertation for the Degree of Candidate in Physicomathematical Sciences).

SO: Vechernaya Moskva January-December 1952

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Book, Physics - Liquid He-3

FD-3281

Card 1/1 Pub. 146 - 40/44

Author : Zinov'yeva, K. N.

Title : Surface tension of liquid He-3 in the region of superlow temperatures
(1.00-0.35°K)

Periodical : Zhur. eksp. i teor. fiz., 29, No 6(12), Dec 1955, 899-901

Abstract : The author had already (ibid., 28, 125, 1955) reported measurements
on the surface tension of liquid He-3 in the interval of temperatures
from critical to 0.93°K by the method of capillary ascent. In the
present communication she presents measurements down to lower tem-

ZINOV'YEVA, K.N.

D-5

USSR / Physics of Low Temperatures.

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9044

Author : Zinov'eva, K.N.
 Institut : Institute of Physical Problems, Academy of Sciences USSR
 Title : Coefficient of Volume Absorption of the Second Sound and
 Viscosity of Normal Component of Helium II to 0.83° K.

Orig Pub : Zh. eksperim. i teor. fiziki, 1956, 31, No 1, 31-36

Abstract : An investigation is made of the absorption of second sound, described earlier (Referat Zhur - Fizika, 1956, 6715) extended toward lower temperatures (down to 0.83° K) and toward higher frequencies (200 -- 4,000 cycles). The procedure used in this investigation is the same as in the previous one. The substitution of glass reflectors for the plexiglass reflectors used in the ends of the resonators has improved considerably the frequency characteristic of the resonators and made it possible to get rid of the effect of transverse resonances (at $\omega \sim 2 -- 4$ kc) on the

Card : 1/2

USSR / Physics of Low Temperatures.

D-5

Abs Jour : Ref Zhur - Fizika, No 4, 9044

Abstract : measured attenuation of second sound for longitudinal resonances. At $T < 1.3^\circ \text{K}$, the absorption was independent of the length of the resonators, which indicates that in practice there are no edge losses. The usual method was used to separate the surface and volume absorptions. The surface absorption is used to calculate the normal viscosity η_n of helium II, which turned out to be in good agreement with measurements carried out with a rotary viscometer (Ref Zhur Fiz, 1956, 13119). Using the resultant values of η_n , the author establishes that part of the volume absorption, caused by η_n , is one order of magnitude smaller than the total absorption. Neglecting this portion, and also the portion connected with the second viscosity, the author determines the values of the kinetic coefficient χ , which is the analogue of the heat conductivity. The resultant experimental curves for $\eta_n(T)$ and $\chi(T)$ are in good agreement with results of theoretical calculations (see I.M. Khalatnikov, Zh. eksperim. i teor. fiziki, 1952, 23, 8, 21).

Card : 2/2

ZINOVYEV, K.N.

AUTHOR
TITLE

PESHKOV, V.P., ZINOVYEVA, K.N., 56-5-50/55
Visual Observation of the "Stratification" of a He^3 - He^4 Solution.
(Vizual'noye nablyudeniye rasslojeniya rastvorov He^3 - He^4 . Russian)
PERIODICAL Zhurnal Eksperim.i Teoret.Fiziki, 1957, Vol 32, Nr 5, pp 1256-1257
(U.S.S.R.)

ABSTRACT

In a transparent Dewar vessel of 3 cm³ capacity pumped of He^3 vapors were caused to condense for the purpose of producing the lowest possible temperatures. A glass ampule with 200mm³ capacity (ϕ = 3,5 mm, height = 20 mm) which was connected with a thin-walled steel capillary (ϕ = 0,5 mm) was dipped into the Dewar vessel in such a manner that the capillary tube protruded beyond the level of the liquid in the Dewar vessel. A gaseous He^3 - He^4 mixture condensed through the capillary tube in the glass ampule in such a manner that a distinct meniscus was formed. At 1,1°K only a homogeneous transparent liquid was visible in the ampule. At a temperature of 0,81±0,01°K (He^3 -vapor pressure 3 mm torr) a thin layer with a strictly defined horizontal boundary surface formed in the surface of the liquid. With a further reduction of the temperature to 0,5°K the boundary surface was conserved and could not even be influenced by shaking the ampule. With an increase of temperature this boundary surface disappeared again completely at more than 0,81°K.

Card 1/2

Visual Observation of the "Stratification" of a $\text{He}^3\text{-He}^4$ 56-5-50/55
Solution.

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Institute for Physical Problems of the Academy of Sciences of the U.S.S.R.

Library of Congress.

AUTHOR: Zinov'yeva, K. N.

SOV/56-34-3-11/55

TITLE: The Viscosity of Liquid He^3 in the range 0.35-3.2°K
and of He^4 Above the λ Point (Vyazkost' zhidkogo He^3 v inter-
vale 0,35-3,2°K i He^4 vyshe λ -tochki)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958,
Vol. 34, Nr 3, pp. 609-615 (USSR)

ABSTRACT: First the author shortly reports on earlier works dealing
with the same subject. The viscosity of liquid He^3 was measur-
ed by means of the method of the capillary viscosimeter, and
all measurements were carried out with 2 thickwalled glass-
-capillaries with an external diameter of 4-5 mm. The measur-
-apparatus is described by means of a diagram and subsequently
the author shortly reports on the measuring process. The
formula used for the computation of the viscosity coefficient
is put down. A diagram shows the results of the measurement
carried out with 2 capillaries; it is dealing with the de-
pendence of the viscosity on temperature. Another diagram
shows the same dependence in logarithmic representation. The
absolute values of the viscosity coefficients were determined

Card 1/3

The Viscosity of Liquid He³ in the range 1.0-3.2°K 80/56-34-3-11/55
and of He⁴ Above the λ Point

within the range above 1°K with an accuracy of $\pm 5\%$, and at lowest temperatures with an accuracy of $\pm 10\%$. The mean values of the viscosity coefficient are listed in a table. Within the temperature interval of from 1-3.2°K the viscosity slightly increases with dropping temperature from $1.6 \cdot 10^{-5}$ to $2.32 \cdot 10^{-5}$ Poise, which agrees qualitatively with one of the variants of the theory by Abrikosov and Khalatnikov. At temperatures below 1°K η increases abruptly and reaches the value of $4.8 \cdot 10^{-5}$ Poise at $T = 0.35^\circ\text{K}$. The temperature dependence of η within the interval 1.1-0.5°K is approximately by the formula $1/T$ described, and only below 0.5°K the dependence becomes steeper, but still not yet as steep as the dependence $1/T^2$ predicted by theory. Measurements within the immediate reach of the critical point could not be made by the author. In order to check the method of measurement the author simultaneously measured with the viscosity of He³ also the viscosity of He⁴ in the range of temperatures above the λ point; the results obtained with two capillaries are shown in a diagram. The mean values of the viscosity coefficients are listed in a table. The results of the measurements discussed coincide with the measurements by R. Bowers and K. Mendelsohn

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The Viscosity of Liquid He³ and of He⁴ Above the λ Point in the Range 0.35-3.2°K SU/56-34-3-11/55

(reference 13) within the error limits as regards the absolute values, but instead of the monotonous increase the author here observed a slight decrease beginning with the temperature 2.8°K. The reasons for this difference are shortly pointed at. The temperature course of the viscosity of He I by the way, does not differ from the temperature course of ordinary liquids (with the exception of the range situated near the λ point). There are 5 figures, 2 tables, and 15 references, 6 of which are Soviet.

ASSOCIATION: Institut fizicheskikh problem Akademii nauk SSSR (Institute for Physical Problems AS USSR)

SUBMITTED: October 21, 1957

Card 3/3

24(8)

SOV/56-36-4-11/70

AUTHORS:

Peshkov, V. P., Zinov'yeva, K. N., Filimonov, A. I.

TITLE:

He³ Cryostats (Kriostaty s He³)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 36, Nr 4, pp 1034-1037 (USSR)

ABSTRACT:

For investigations at low temperatures (1 - 4.2°K) cryostats with He⁴ are generally used. However, as the latter becomes superfluid already at 2.18°K, it is difficult, by means of such devices, to get near to absolute zero. A record achievement was attained by means of such a He⁴-cryostat by Keesom (Leiden, 1932, Ref 1) with 0.71°K with the aid of a strong pump (pumping capacity 675 l/sec); Lazarev and Yesel'son (Ref 2) were able to attain the same value by means of a much weaker pump (15 l/sec). In the present paper the authors describe work carried out with cryostat devices operating with He⁴ and He³, which are able to attain and to maintain temperatures of up to 0.3°K. These devices are at the Institut fizicheskikh problem (Institute for Physical Problems). Use of the

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SOV/56-36-4-11/70

He³ Cryostats

very rare isotope He³ was found to be necessary, because at such low temperatures He³ is not yet superfluid and therefore pumping out helium vapors presents no difficulties. Figure 1 is a schematical representation of the first device. In principle, the cooling vessel consists of a double Dewar vessel containing He⁴; in its interior there is a second Dewar vessel, which contains 3 cm³ of liquid He³. Sucking off of the vapors is carried out by means of a thin-walled steel tube which is connected by means of a copper connecting piece with the Dewar vessel, by means of a mercury diffusion pump DRN-50 (30 l/sec) operating with a counterpressure of 25-30 torr.

Owing to the low temperature of the He⁴-surrounding, this pump is able to operate without a pre-vacuum. The lowest temperature attainable by means of this device is about 0.3°K (p = 0.002 torr). Temperature measurement is carried out by means of a resistance thermometer (30 μ phosphor-bronze wire) which had been previously gauged at He³-vapor pressure. (Pressure measurement by means of a MacLeod manometer). If a regular supply of liquid He³ is maintained, the device may be kept in operation for 8 - 10 hours with one and the same fill.

Card 2/8

3

SOV/56-36-4-11/70

He³ Cryostats

ling of gaseous He³ (about 3 l). If the pumps are disconnected, the He³ liquid increases within 3 hours from 0.3 to 1°K. The second model is, in principle, similar to the first (Fig 1b), the different construction of the cooling vessel is shown by figure 2. The mechanical Tepler-pump (mercury operating as a pre-vacuum pump was replaced in device 2 by an oil pump of the type NVG-2 developed at the NIVI. The He³-vapors were also sucked off by means of a mercury diffusion pump which, in this case, however, worked with the pre-vacuum pump NVG-2. By means of this device it is possible to attain up to 0.35°K, by continuous operation 0.5°K. Temperature measurement was carried out as in the case of device 1. The two devices are described with all details by the present paper. There are 2 figures and 6 references, 3 of which are Soviet.

ASSOCIATION: Institut fizicheskikh problem Akademii nauk SSSR
(Institute for Physical Problems of the Academy of Sciences, USSR)

Card 3/3

5(4)

AUTHORS:

Zinov'yeva, K. N., Peshkov, V. P.

BOV/56-37-1-5/64

TITLE:

Phase Diagram of Liquid He^3 - He^4 Solutions (Fazovaya diagramma zhidkikh rastvorov He^3 - He^4)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 37, Nr 1, pp 33-37 (USSR)

ABSTRACT:

Following an earlier paper (Ref 1), the authors report further investigations of the phase diagrams of He^3 - He^4 -mixtures, of the temperature course of the curve of λ -transitions in such mixtures, and of the phase separation curve for solutions with high He^3 -concentration. All measurements were carried out by means of visual observation. The device with which the authors operated is described in detail; its inner part, which consists essentially of a double-walled Dewar vessel, is shown by figure 1. A Dewar vessel with liquid He^4 contains a transparent Dewar vessel with liquid He^3 ; the latter contains a glass ampoule, into which a condensed He^3 - He^4 mixture is introduced from above through a long steel capillary tube. The temperature of the mixture in the glass

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Phase Diagram of Liquid He^3 - He^4 Solutions

SOV/56-37-1-5/64

ampoule is measured by means of a resistance thermometer and vapor pressure by means of a MacLeod manometer. Figure 2 shows the results obtained by measuring the λ -curve and the phase separation curve of the mixture. The data obtained by the authors, those obtained by Yesel'son, Berezhnyak, Kaganov (Ref 4), as well as those obtained from reference 7, are located on continuous curves; the curve of reference 3 partly shows a certain deviation. The critical point for phase separation in this mixture became $T_{\text{crit}}^{\text{max}} = (0.88 \pm 0.01)^\circ \text{K}$ at a molar He^3 -concentration $x = (64 \pm 1) \%$ ($x = \text{He}^3 / (\text{He}^3 + \text{He}^4) [\%]$). The point of intersection between the λ -curve and the phase separation curve has the coordinates $T_{\lambda}^{\text{crit}} = (0.67 \pm 0.02)^\circ \text{K}$ and $x = (81 \pm 1) \%$. Above this point both phases are superfluid, and below it the He^3 -rich phase is not superfluid. The measuring data obtained are given in a table for a multiple of x -values. Finally, the authors thank P. L. Kapitsa for his interest in this investigation, and N. I. Yakovleva for assisting in the measurements. There are 2 figures, 1 table, and 8 references, 3 of which are Soviet.

Card 2/3

Phase Diagram of Liquid He^3 - He^4 Solutions

SOV/56-37-1-5/64

ASSOCIATION: Institut fizicheskikh problem Akademii nauk SSSR (Institute of
Physical Problems of the Academy of Sciences, USSR)

SUBMITTED: February 3, 1959

Card 3/3

24(8),21(5),5(4)

AUTHORS: Peshkov, V. P., Zinov'yeva, Z. N.

SOV/53-67-2-1/7

TITLE: Experimental Work With He³ (Eksperimental'nyye raboty s He³)

PERIODICAL: Uspekhi fizicheskikh nauk, 1959, Vol 67, Nr 2, pp 193-242 (USSR)

ABSTRACT: In the present paper the authors give a very detailed survey, which was compiled from more than 100 Soviet and Western publications, on the production and investigation of He³ and on its properties. This survey is of particular value because of the numerous and most recent data it contains, which are clearly shown by several tables. The following problems are dealt with individually: The methods of separating He³ (three tables, some of which extend over several pages, contain data concerning the dependence of vapor pressure on the temperature for various compositions of the liquid phase, the dependence of output condensation pressure on the temperature for mixtures with different He³-content, the He³-distribution between vapor and liquid for different compositions of the liquid phase and various temperatures); the pressure of saturated vapor and the determination of the critical point (a table gives He³ vapor pressure for low temperatures -0.30°K to 3.30°K in steps of

Card 1/3

Experimental Work With He³

SOV/53-67-2-1/7

0.01°K); the thermonuclear pressure differences in He³ (Table 6), the melting-point curve and the phase transitions of solid He³ (Figs 8-11, Tables 7, 8); the density of liquid, vaporous, and solid He³ (Tables 9, 10); evaporation heat (Fig 14 and Table 11); specific heat (figure 15 shows temperature dependence up to 2.0°K of the specific heat of liquid He³ under saturated steam; experimental and theoretical curves are compared; figure 16 shows the molar heat capacity of liquid He³ between 0.10 and 0.75°K at a pressure of 120-150 torr); the entropy (Figs 17, 18, 19); the magnetic properties of He³ (contrary to He⁴, the He³ atom has a magnetic moment that is different from zero,

$1.07 \cdot 10^{-23}$ CGS units, and a spin 1/2, and therefore it is characterized by a number of special interesting features which are discussed); the absence of superfluidity; viscosity (figures 24 and 25 show viscosimeters, table 13 contains data on the temperature range of between 0.35 and 3.2°K in different intervals, figure 26 shows the corresponding diagram, figure 27 the dependence of the η -value for gaseous He³ and He⁴ on temperature). Further chapters deal with thermal conductivity, the temperature jumps of He³ on its boundary with a solid, surface tension (diagram in Figure 31, range 0.25 - 3°K),

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Experimental Work With He^3

SOV/53-67-2-1/7

the measurement of the velocity of sound (Figure 32 shows a measuring apparatus according to reference 101, Figure 33 the temperature diagram in liquid He^3 , Table 14 contains data for $u(T)$, the compressibility of He^3 (Figure 34 - isothermal compressibility of liquid He^3 , Figure 35 - adiabatic compressibility, the adsorption of He^3 on active carbon). The following chapter discusses several types of cryostats and the last chapter discusses the possibility of attaining deep crystallization temperatures for He^3 (Pomeranchuk, Ref 46). The following Soviet scientists are mentioned: B. N. Yesel'son, B. G. Lazarev, N. G. Bereznyak, M. I. Kaganov, T. P. Ptukha, V. M. Kuznetsov, N. Ye. Alekseyevskiy, V. N. Kachinskiy, L. D. Landau, I. M. Khalatnikov, A. A. Abrikosov, K. N. Zinov'yeva, A. I. Filimonov and I. B. Danilov. There are 40 figures, 15 tables, and 110 references, 27 of which are Soviet.

Card 3/3

[illegible]

L 13612-63

ENT(1)/ENT(1)/ENT(1) (P)

APPROVED

ACCESSION NO: AP300310

8/0056/13/064/001, 1937-1946

AUTHOR: Linnov'yeva, A. N.

DATE: 1946

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 1837-1846

TOPIC TAGS: liquid helium, He III, He IV, superfluidity, and other properties.

4 ACCESSION NR. AP300106

PROCESSING. "In conclusion, it is noted that the above information is being provided for your information and is not to be used for any other purpose."

SUBMITTED: 17Jen63 DATE ACQ: 23Jul63 ENCL: 02
SUB CODE: 00 NO REF SOV: 005 OTHER: 006

Cord 2/82

YUR'YEV, Yu. K., VENDEL'SHIYN, ZINOV'EVA, L. A.

Pyrrolidones

Transformation of butyrolactone into α -pyrrolidone and N-phenyl- α -pyrrolidone. Uch. zap. Mosk. un., No. 132, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October 1953.² Unclassified.

YUR'YEV... YU. K.: VENDEL'SHTEYN. YE. G.:
ZINOV'YEV. L. A.

Lactones

Part 35. Conversion of butyrolactone to thiophanon
pyrrolidone-2 and 1-phenylpyrrolidone-2. Zhur. ob
khim. 22, 84, No. 3, 1952. Laboratoriya Organi-
cheskoy Khimii im. N. D. Zelinskogo Moskovskogo
Ordena Lenina Gosudarstvennogo Universiteta.

Monthly List of Russian Accessions, Library of
Congress, August 1952. UNCLASSIFIED.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
p 211 (USSR) 15-57-3-4013

AUTHOR: Zinov'yeva, L. A.

TITLE: Methods of Hydrodynamic Calculations of the Gas Factor
in Oil Fields Using Gas Lift for Extraction (Metodika
gidrodinamicheskikh raschetov gazovogo faktora neftya-
nykh mestorozhdeniy, ekspluatiruyushchikhsya v uslovi-
yakh rezhima rastvorennogo gaza)

PERIODICAL: Tr. Vses. neftegaz. n.-i. in-ta, 1956, Nr 8, pp 323-332.

ABSTRACT: Bibliographic entry

Card 1/1

YUR'YEV, Yu. K., VENDEL'SHTEYN, ZINOV'EVA, L. A.

Pyrrolidones

Transformation of butyrolactone into -pyrrolidone and N-phenyl - pyrrolidone, Uch. Zap. Mosk. un. , No. 132, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October 195²₃, Uncl.

Zinov'eva L.A.

AFANAS'YEVA, A.V.; ZINOV'YEVA, L.A.

Simultaneous oil field exploitation and gas collection from gas
cap. Neft. khoz. 35 no.10:44-51 O '57. (MIRA 11:1)
(Gas, Natural) (Petroleum engineering)

ZINOV'YEVA, L. A.

"Influence of the Properties of Stratal Petroleums on Flow Toward the Wells
in Dissolved Gas Conditions." Cand Tech Sci, All-Union Sci-Res Petroleum Gas
Inst, Moscow, 1954. (KL, No 2, Jan 55)

ZINOV'YEVA, L.A.

Approximation method of calculating the flow of gas-saturated oil
to wells taking into consideration the tangible properties of oil
sands. Trudy VNII no.6:254-269 '54. (MLRA 9:1)
(Fluid dynamics) (Petroleum engineering)

ZINOV'YEVA, L. A.

Analysis of the Influence of Some of the Properties of Stratified Petroleum on the Process of Its Filtration in Conditions of a Dissolved Gas Regime

The author investigates the radial filtration of aerated petroleum, taking into account the dependence of the viscosity of the petroleum on the pressure, the nonlinearity of the law of solubility of gas in petroleum, and the shrinkage of the petroleum during degasification. She considers the influence of each of these factors separately and in combination, and discusses their effect on the yield of petroleum. (RZh-Mekh, No. 6, 1955) Tr. Vses. Naftgaz. n.-i. in-ta, No. 6, 1954, 240-253

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

ZINDV'YEVA, L.A.

Hydrodynamic calculations of the gas factor of oil pools producing
with dissolved-gas drive. Trudy VNII no.8:323-332 '56.

(MLRA 9:12)

(Fluid dynamics) (Petroleum engineering)

ROZENBERG, M.D.; ZINOV'YEVA, L.A.; KLYAROVSKIY, G.V.

Method for hydrodynamic calculations of casinghead gas recovery
in dissolved gas drives. Trudy VNII no.10:257-265 '57.

(MIRA 14:6)

(Gas, Natural)

ZINOV'YEVA, L.A.

Biology and ecology of robber flies (Diptera, Asilidae) in the Maryn
Sands. Ent. oboz. 38 no.3:554-567 '59. (MIRA 13:1)

1. Moskovskiy lesotekhnicheskii institut, Moskva.
(West Kazakhstan Province--Robber flies)

SOV/124-58-2-2021

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 75 (USSR)

AUTHORS: Rozenberg, M. D., Zinov'eva, L. A., Klyarovskiy, G. V.

TITLE: Hydrodynamic Calculation Methods Relative to the Recovery of the Gas Content of a Petroleum, When the Gas Occurs in Solution (Metodika gidrodinamicheskikh raschetov dobychi poputnogo gaza pri rezhime rastvorennogo gaza)

PERIODICAL: Tr. Vses. neftegaz. n. -i. in-ta, 1957, Nr 10, pp 257-265

ABSTRACT: Presentation of a calculation method relative to the recovery of gas appearing in deposits in dissolved form, starting from the prescribed (time) rate of withdrawal of the petroleum; the proposed method employs the petroleum-balance equation and a condition which connects the mean petroleum saturation within the reservoir and the mean pressure, which varies as the recovery process progresses. This condition is obtained as a result of the numerical integration of the relationship between the values of the averaged petroleum saturation and the pressure, as supplied in a work by M. D. Rozenberg [Rozenberg, M. D., K raschetam istoshcheniya neftyanykh mestorozhdeniy pri rezhime rastvorennogo gaza (On

Card 1/2

SOV/124-58-2-2021

Hydrodynamic Calculation Methods Relative to the Recovery (cont.)

the Calculations of the Depletion of Petroleum Deposits in the Presence of Dissolved Gas). Tr. Vses. neftegaz. n. -i. in-ta, 1957, Nr 10, pp 250-256; RZhMekh, 1953, Nr 2, abstract 2020]. The authors provide a numerical sample calculation for the determination of the recovery of the gas and adduce concepts relative to the verification and correction of such calculations with reference to production-measurement data.

V. A. Arkhangel'skiy

Card 2/2

ZINOV'YEVA, L. A.; KETOVA, Yu. V.

Chufa

Chufa in the Molotov Botanical Garden. Biol. Glav. bot.
sada No. 10, 1951.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

ZINOV'YEVA, L. A.

"Harmful and Beneficial Soil Entomofauna of the Extreme South-eastern Area of the European USSR." Cand Biol Sci, Moscow Order of Lenin State U ineni N. V. Lomonosov. (RZhBiol, No 1, Sep 54)

SO: Sum 432, 29 Mar 55

ZINOV'YEVA, L.A.; RAFFES, P.M.

Influence of the character of plants and the soil-developing process on the colonization of soils by cockchafers in the Maryn Sands. Zool.shur. 33 no.5:1081-1091 S-O '54.(MLHA 7:11)

1. Kafedra entomologii MGU im. M.V.Lomonosova i Institut lesa Akademii nauk SSSR.

(Maryn Sands--Cockchafers) (Cockchafers--Maryn Sands)

(Maryn Sands--Ecology) (Ecology--Maryn Sands)

ZIKOV'YEVA, L.A.

Soil fauna in different forest types of the White Russian Polesye.
Zool.shur. 34 no.5:965-974 S-O '55. (MLRA 9:1)

1.Kafedra entomologii Moskovskogo gosudarstvennogo universiteta
imeni M.V.Lomonosova.
(Polesye--Soil fauna)

VORONTSOV, Aleksey Ivanovich, dotsent; ZINOV'YNA, Lyubov' Afanas'yevna,
kandidat biologicheskikh nauk; SERGEYEVA, Irina Alekseyevna;
KHRAMTSOV, N.M., redaktor; SVITLAYEVA, A.S., redaktor izdatel'stva;
BACHURINA, A.M., tekhnicheskij redaktor

[Manual on forest protection for laboratory and practical exercises]
Posobie po lesozashchite dlia laboratorno-prakticheskikh zaniatii.
Moskva, Goslesbumizdat, 1956. 84 p. (MLBA 10:2)
(Forest protection)

ZINOV'YEVA, L.A.

New genus of robber flies (Diptera, Asilidae) from Kazakhstan and
Central Asia. Ent. obozr. 35 no. 1: 196-200 '56. (MLRA 9:10)

1. Kafedra entomologii Moskovskogo Gosudarstvennogo universiteta,
Moskva.

(Soviet Central Asia--Robber flies)

ZINOVYEVA, L.A.

18

AFANASYEVA, A.Y., BAISHEV, B.T., VORISOV, YU.P., VASILYEVA, V.N.,
VOYNOV, V.V., ZINOVYEVA, L.A., KAMEKITSKIY, S.G., MAKISOV, M.I.,
MAKISOV, M.M., MAYDEBOR, V.N., NOVINOV, I.P., SOROLOVSKIY, N.V.,
SUSHILIN, V.A., YAKOVLEV, V.P.

Problem of developing oil in the USSR

Report to be submitted for the Sixth World Petroleum Congress
Frankfurt, 16-26 June 63

USSR/General and Specialized Zoology - Insects. Harmful
Insects and Acarids. Forest Pests.

P

Ans Jour : Ref Zhur Biol., No 6, 1959, 25480

Author : Zinov'yeva, L.A.

Inst : University of Forestry Engineering

Title : Application of Phosphorous Organic Insecticides in the
Control of Forest Pests.

Orig Pub : Nauchn. dokl. vyssh. shkoly. Lesoinzh. delo, 1958, No 1,
43-46

Abstract : In laboratory experiments, all caterpillars (C) of the
grey-brown brush moth perished from the application of
0.1% thiophos emulsion, but C of the gypsy moth of the
5-6th ages survived. 0.01% thiophos emulsion is effective
against C of the oak prominent of the 4-5th ages, and
0.003% emulsion against C of the nun moth and gypsy moth

Card 1/2

SOV/124-57-3-3297

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 95 (USSR)

AUTHOR: Zinov'yeva, L. A.

TITLE: A Method of Hydrodynamic Computation of the Gas-oil Ratio of Oil Deposits Being Exploited Under Conditions in Which the Gases are Dissolved in the Oil (Metodika gidrodinamicheskikh raschetov gazovogo faktora neftyanykh mestorozhdeniy, ekspluatiruyushchikhsya v usloviyakh rezhima rastvorennogo gaza)

PERIODICAL: Tr. Vses. neftegaz. n.-i. in-ta, 1956, Nr 8, pp 323-332

ABSTRACT: A presentation of a method for the approximate computation of averaged (within the reservoir) values of oil saturation, the gas-oil ratio, and the yield of oil from deposits containing dissolved natural gas. An example is given illustrating the processing of industrial data for the purpose of evaluating the degree of accuracy of the gas-oil ratios which are obtained with the aid of calculations performed on the basis of averaged values of pressure and oil saturation. An evaluation of the averaged values of the factors indicated above, as well as of the time required to deplete the reservoir, would present great interest. The necessary data could be obtained from the solution of the respective equations contained in the article.

V. A. Arkhangel'skiy

Card 1/1

GLADYSHEVA, K.F.; ZINOV'YEVA, L.D.

Using thioacetamide in the complexometric determination
of zinc and cadmium. Sbor.trud. VNIITSVETMET no.9449-82
'65. (MIRA 18:11)

X
YURASOVA, G.M.; ZINOV'YEVA, I.D.

Complexometric determination of barium in barite ores.
Sbor.trud. VNIISVETMET no.9:53-56 '65.

(MKHA 18:11)

ZINOV'IEVA, I.D.; GLADYSHEVA, K.F.; ZELENINA, T.P.

Sulfur determination with the use of ion exchange chromatography.
Sber.trud. VNIITSVETMET no.9:118-119 '65.

(MIRA 18:11)

HELENINA, T.P.; GLADYKHVA, K.P.; ZINOV'YEVA, I.D.

Determining tin in tungsten products. Sbor. trad. VNIITSVAMET
no.9:124-126 '65. (MIRA 18:11)

CHUMAKOV, Yu.I.; MARTYNOVA, E.N.; ZINOV'YEVA, L.M.; KHIMCHENKO, T.V.

2,6-Dialkoxy-3-(1'-alkoxyalkyl)tetrahydropyrans and alkyl pyridines
based on them. Zhur. ob. khim. 34 no.10:3511 O '64.

(MIRA 17:11)

1. Kiyevskiy politekhnicheskii institut.

ACC NR: AT7005072

SOURCE CODE: UR/2546/66/000/154/0041/0046

AUTHORS: Khrabrov, Yu. D.; Zinov'yeva, L. M.

ORG: none

TITLE: Calculated prognosis of the H_{500} field for the subsequent synoptic period and the possibility for increasing its accuracy

SOURCE: Moscow. Tsentral'nyy institut prognozov. Trudy, no. 154, 1966. Vzaimodeystviye protsessov v stratosfere i troposfere i dolgosrochnyye prognozy pogody (Interaction of processes in the stratosphere and troposphere and long-range weather forecasting), 41-46

TOPIC TAGS: atmospheric model, synoptic meteorology, atmospheric interaction, ^{computer} calculation

ABSTRACT: A new method for calculation of H_{500} prognosis for the following synoptic period is being worked out in view of the unsatisfactory results obtained by applying the method of A. L. Kats, Yu. B. Khrabrov, M. N. Fedulova, and O. M. Yakusheva (Prognoz srednikh znacheniy H_{500} na tekushchiy period i tendentsiyu sleduyushchego sinopticheskogo perioda s pomoshch'yu empiricheskikh funktsiy vliyaniya. Trudy TsIP, vyp. 119, 1962) involving the current configurations. The working formula developed is represented by the equation

$$(H)_n = \sum_{i=1}^{10} A_{ni}(T_{500})_i + \sum_{i=1}^{10} B_{ni}(\Delta T)_i + \sum_{i=1}^4 C_{ni}I_i + \sum_{i=1}^4 D_{ni}I_{ni}$$

Card 1/2

ACC NR: AT7005072

where k - point for which H' is calculated; i - 10 points for which forecasters T_{500} and ΔT are considered; $(T_{500})'_i - T_{500}$ deviation of the synoptic period tendencies from the average value for the given circulation type; $\Delta T - T_{500}$ difference between the first and second day of the synoptic period tendency; $(H)_k'$ - prognosis of the deviation from the norm of H_{500} in the future synoptic period. As a norm, one assumes the average value of H_{500} for a given type for many years; I_z - zonal circulation indices in 3 sectors of the northern hemisphere; I_M - meridional indices in the same sectors; A_{ki}, B_{ki}, C_k, D_k - weight coefficients (empirical effect functions). The calculations, performed by electronic computers, were repeated twice at 20 European and Asiatic stations. The accuracy of the obtained prognostic values was considerably improved when the strictly terrestrial factors (temperature, wind, moisture distribution, etc) were qualitatively corrected by also introducing the effect of the bombardment of the earth's atmosphere by solar currents. This was particularly noticeable and important during the period of the passage of sunspots through the central meridian of the sun. Orig. art. has: 1 figure, 4 tables, and 2 equations.

SUB CODE: 04/ SUM DATE: none/ ORIG REF: 005

Card 2/2

ZINOV'YEVA, L.S.

Medical and industrial work fitness evaluation and employment in
spondyloarthritis ankylopoietica. Ortop., travm. protez. 19 no.1:
48-50 Ja-F '58. (MIRA 11:4)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo instituta ekspertisy
trudospособnosti i organizatsii truda invalidov (dir. - prof. O.I.
Sokol'nikov)

(SPONDYLITIS, ANKYLOSING

expert testimony & disability evaluation (Rus))

(EXPERT TESTIMONY

of ankylosing spondylitis (Rus))

(DISABILITY EVALUATION, in various dis.

ankylosing spondylitis (Rus))

OSTAPKO, K.I., kand.med.nauk; RED'KINA, G.I., starshiy inzhener;
ZINOV'YEVA, L.S., vrach-ekspert

Work organization following kineplasty of the forearm and ampu-
tation of the shoulder. Ortop., travm.i protez. no.10:49-52
'61. (MIRA 14:10)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo instituta ekspertizy
trudospособnosti i organizatsii truda invalidov (dir. - prof.
D.I. Gritskevich).
(AMPUTEES--REHABILITATION)

ZINOV'YEVA, L.S.

Medical occupational evaluation in sequelae of injuries of the hand
and fingers. Ortop. travm. i protez. 21 no. 10:26-31 '60.

(MIRA 14:1)

(HAND---WOUNDS AND INJURIES) (DISABILITY EVALUATION)

ZINOV'YEVA, L. S., MOGILEVSKIY, YA. A.

"Basic Hygienic Problems in the Study and Utilization of
Subterranean Waters."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

PA 65T74

USSR/Medicine - Hygiene and Sanitation
Medicine - Water Supply

Apr 1948

"Sixth Plenum of the Directors of the All-Union Scientific Research Engineering Society (VNITO) of Water Supply and Sanitary Engineering," L. S. Zinov'yeva, 2 1/2 pp

"Gig 1 San" No 4

Convened in Gor'kiy 4-7 Dec 1947. Briefs proceedings and lists articles and papers presented for reading. One of the largest future tasks is to develop effective methods for purifying river waters.

65T74

ZINOV'YEVA, L.S.

Examination of subterranean waters. Gig. i san. no.11:14-19 N '54.

(MIRA 7:12)

1. Iz nauchno-issledovatel'skogo sanitarnogo instituta imeni
Erismana.

(WATER SUPPLY

subterranean waters exam.)

VLASHCHENKO, L.F.; NOVIKOV, V.M.; ZINOV'YEVA, M.M.; SIDOROVA, A.P.;
KARDASHOVA, A.A.; KLEYMENTOV, I.I.; KRASHNOL'SKIY, N.M.
[deceased]; LUKASH, Ye.G.; SAMOFALOV, P.Ye.; YASHINA,
Ye.I.; KULIKOV, P.I., dots., retsenzents; MAKAROVA, T.I.,
kand. tekhn. nauk, retsenzents; MERENBURG, A.N., spets. red.;
KOSSOVA, O.N., red.; SOKOLOVA, I.A., tekhn.red.

[Handbook for the technologist of the fishing industry]
Spravochnik tekhnologa rybnoi promyshlennosti. Moskva, Pi-
shchepromizdat. Vol.1. 1963. 589 p. (MIRA 1743)

15.9130

h1115

S/069/62/024/005/006/010
B106/B186

AUTHORS: Lebedev, A. V., Mints, S. M., Rakhlin, P. I., Zinov'yeva, M. N.

TITLE: Effect of various factors on the low-temperature strength of synthetic latexes. 2. Effect of changes in the polymeric phase

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 5, 1962, 572 - 577

TEXT: The effect of the composition of the polymeric phase, of the plasticity of the polymer, and of changes of the polymer during storage on the low-temperature strength of synthetic latex was studied. The decrease in frost resistance ("aging") of latex on long storage can be delayed considerably by excluding oxygen or by adding antioxidants. A styrene content of more than 60% in the polymerization mixture of the monomers reduces the frost resistance of divinyl styrene latex. It was shown by the example of divinyl nitrile latex that latex produced with soaps of the molecular weight 190 as emulsifiers was, under otherwise equal conditions, more resistant to frost than latex produced with Nekal. Divinyl nitrile latex is much less frost-resistant than divinyl styrene

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B106/B186

15 9130
AUTHORS:

Lebedev, A. V., Mints, S. M., Rakhlin, P. I., Zinov'yeva, M. N.

TITLE:

Effect of various factors on the low-temperature strength of synthetic latexes. 1. Effect of changes in the aqueous phase

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 5, 1962, 565 - 571

TEXT: This paper is the first in a series of systematic studies on the freezing strength of rubber-like polymeric latexes such as CKC-30П (SKS-30P) and CKC-65П (SKS-65GP) as dependent on the compounding formula, polymerization conditions, and other factors. A quantitative method was worked out for determining the resistance of divinyl styrene latex to low temperatures. The percent content of dry coagulate in the latex polymer serves as a measure of resistance. Experiments with variation of single factors at otherwise equal conditions gave the following results: The frost resistance of latex depends on the nature of the cations and anions of the emulsifier; it decreases in the order of the cations $K^+ > Na^+ > NH_4^+$ and in the order of the anions paraffinate $> Nekal > Dresinate$ (salt of disproportionate colophony). With addition of emulsifiers to the finished

Card 1/3

Effect of various factors on...

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latex, its frost resistance increases monotonously with the amount of emulsifier used in potassium and ammonium soaps, whereas it passes a maximum in the case of Nekal and sodium Dresinate (with 50-60% saturation of the adsorption layers). With the use of soaps of different molecular weights as emulsifiers, the frost resistance of latex decreases with the molecular weight increasing from 190 to 300. Additions of small amounts of univalent metal salts or of Leukanol to the aqueous phase slightly improve the frost resistance of latex; the effect of additions of non-ionic emulsifiers depends on the nature of the latex polymer and on the hydrophile-lipophile balance in the emulsifier. The frost resistance of latex is independent of its concentration, and increases with the pH of the aqueous phase. High resistance to frost is reached by introduction of ammonia, which facilitates transport and storage in winter. There are 4 figures and 5 tables. The most important English-language references are: H. W. Walker, J. Phys. Coll. Chem. 51, 451, 1947; R. J. Orr, Rubb. Plast Age 41, 1027, 1960; T. E. Daniels, W. H. Watson, F. C. White, Rubber and Plast. Age 40, 1057, 1959.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskogo kauchuka
im. S. V. Lebedeva (Scientific Research Institute of Synthetic
Rubber imeni S. V. Lebedev)

Card 2/3

ZINOV'YEVA, M. T.

UssR/Medicine - Shock
Medicine - Blood

Jan/Feb 1948

"Variations in Potassium, Calcium, and Chlorine Contents in the Blood Serum after Electric Shocks," M. T. Zinov'yeva, Chair of Pathol Physiol, First Lenin-Grand Med Inst imeni Academician Pavlov, 5 pp

"Zhiviy Pavol" Vol 1, No 1

Experiments produced the following results due to electric shocks: 1) Increase in potassium content in the blood serum; content was higher in veins than in arterios and higher in rabbits than in dogs. 2) Increase in potassium content depended on the amount of potassium supplied by muscular tissues.

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UssR/Medicine - Shock (Contd)

Jan/Feb 1948

3) Chlorine content in the serum of the arterial blood altered irregularly; in the major part of the experiments, however, chlorine content in the serum of the venal blood increased. Submitted, 14 Jan 1947. Deputy of Chair of Pathological Physiology is Prof I. R. Petrov.

41770

ZINOV'YEVA, N.F.

Change in the annual cycle of the development of lemons grown
in trenches. Vop.biol.i kraev.med. no.3:92-97 '62. (MIRA 16:3)
(LEMON)

S/598/61/000/006/002/034
D245/D303

AUTHORS: Lukashenko, E.Ye., Zinov'yeva, N.K., Terekhin, V.P.
and Feofanov, L.P.

TITLE: The mechanism of magnesiothermal reduction and formation of titanium sponge in an industrial reactor

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego plavy. no. 6, 1961. Metallotermiya i elektrokimiya titan, 14 - 20

TEXT: The authors carried out 6 experiments on the process using a reaction vessel enclosed in an industrial reactor and with $TiCl_4$ feed of 20, 30, 60, 80 and 95 % of that normally applied. The results show that the mechanism of the process can be regarded as in three stages. In the first ($TiCl_4$ consumption $< 60\%$) refined sponge and a thin lining form on the reactor wall. $TiCl_4$ reduction prevails on the mirror surface of the fused Mg. The reaction rate is rapid and the role of secondary reactions unimportant. In the second stage ($TiCl_4$ consumption $< 80\%$), Mg penetrates the pores

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